

Group II, claims 2-3 and 14-15, drawn to plant cells transformed with nucleic acid molecules encoding plastidial ADP/ATP translocators, and methods for their production. Applicants respectfully traverse the requirement.

The Examiner asserts that the inventions listed in Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature. Specifically, the Examiner argues that the feature linking inventions I and II, plant transformation with nucleic acid molecules whose presence leads to increased plastidial ADP/ATP translocator activity, is not special because it is disclosed in Neuhaus et al. (1997). Applicants submit, however, that the Examiner has not properly construed or applied the unity of the invention standard applicable under PCT Rule 13.

Under PCT Rule 13.2, the application fulfills the unity of invention requirement when there is a “technical relationship among those inventions involving one or more of the same or corresponding ‘special technical features’”. The rule defines that the expression “special technical features” means those technical features that define a contribution, which each of the inventions, considered as a whole, makes over the prior art. In the present application, the “technical relationship” or “special technical feature” involved with all of claims is the fundamental invention based on a process for increasing plant yields by transforming the plant or plant cell with a foreign nucleic acid molecule whose presence or expression leads to an increase in plastidial ADP/ATP translocator activity. As explained, for example, on pages 4-7 of the instant Specification, expression of the foreign nucleic acid molecule leads to an increase in the

yield of content substances (i.e. starch or oil) and/or biomass, when compared to non-transformed plants of the same genotype, cultivated under the same conditions. Applicants submit that this technical relationship and special technical feature is common to the invention recited in all the claims and thereby provides clear unity of invention.

The Examiner states that the Neuhaus reference teaches isolated nucleic acids encoding an ADP/ATP translocator and bacterial and yeast transformation therewith, and suggests plant transformation therewith to produce plants with increased yield and altered oil/carbohydrate production. The Examiner cites to the Abstract and the first full paragraph in column 1 of page 79 to support his position. The passage on page 79 states, in relevant part, that "The availability of the gene coding for the plastidic ADP/ATP translocator together with the possibility of constructing transgenic plants where the expression of this translocator is either down- or up-regulated will help us in understanding, whether it is possible to manipulate starch or fatty acid content or even the ratio between starch and fatty acids in storage organs of higher plants by increasing or decreasing the rate of ATP import into plastids.". From this passage, the Examiner believes that Neuhaus suggests plant transformation with nucleic acids encoding an ADP/ATP translocator in order to increase yield and to alter oil/carbohydrate production. Applicant respectfully disagrees with the conclusion the Examiner has drawn.

This passage merely states that the provision of nucleic acids encoding the plastidial ADP/ATP translocator allows it to produce transgenic plants to find out whether down- or up-regulation of ADP/ATP-translocator activity would influence starch or fatty acid content or the ration between starch and fatty acids. The authors could not know whether such an influence

would be detected. There is no information in this reference that indicates the transformation of a plant with a plastidial ADP/ATP translocator correlates with an increase in yield or would alter oil/carbohydrate production.

The Examiner will note that no unity of invention objection was raised in the International Phase of this application, which also applies the unity of invention standard of PCT Rule 13. Applicants suggest that the Examiner has incorrectly applied Rule 13.2. An International Application which complies with these unity of invention requirements must then be excepted by all of the designated and elected offices, including the U.S Patent and Trademark Office (USPTO), since Article 27(1) of the Patent Cooperation Treaty does not permit any National Law or National Office to require compliance with different regulations relating to the contents of the International Application. Thus, the U.S application must be examined for unity of invention consistent with the Patent Cooperation Treaty, not just by giving verbal ascent to the unity of invention standard, but in actual application of the standard. See *Caterpillar, Tractor Co. v. Commissioner of Patent and Trademarks*, 231 USPQ 590 (E.D.VA. 1986).

For the above reasons, Applicants request that the Restriction Requirement be withdrawn in its entirety and that all the claims be examined in this application. In order to be fully responsive to the Office Action, however, Applicants elect, with traverse, should the Examiner persist in the Requirement, to prosecute the claims of Group I, namely claims 1, 4-13 and 16, drawn to plant cells and plants transformed with nucleic acid molecules whose presence leads to increased plastidial ADP/ATP translocator activity, and methods for their production and use.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Leonard R. Svensson (Reg. No. 30,330) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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